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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,680	11/30/1999	MITSUJI MARUMO	35.G2504	8003
5514 7590 09/01/2005 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER RAO, SHRINIVAS H	
			ART UNIT 2814	PAPER NUMBER

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/450,680

Applicant(s)

MARUMO, MITSUJI

Examiner

Steven H. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 22-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

Applicants' amendment filed on June 27, 2005 has been entered and forwarded to the Examiner on July 01, 2005.

Therefore claims 22,28 and 29 as amended by the amendment and claims 23-27 and 30-33 as previously recited are currently pending in the Application.

Claims 1-21 and 34-40 were previously cancelled.

***Information Disclosure Statement***

No further IDS has been filed after the one filed on October 04, 2001.

***Claim Rejections - 35 USC Section 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action :

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22 to 26 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable are rejected under 35 U.S.C. 103 (a) as being unpatentable over AAPR ( Applicants' Admitted Priori Art) in view of Drake et al. ( U.S. Patent No. 5,006,760, herein after Drake). ( for response to Applicants' arguments -see section below).

With respect to claim 22, AAPR describes a pod for attachment to an outside surface of a grounded electromagnetic-shielded chamber having a door and a grounded flange portion, around the door, on the outside surface and containing a device manufacturing apparatus for processing a substrate , said pod comprising : Walls for containing the substrate ( AAPR figure 10) and a lid for an opening defined by the walls ,( AAPR specification page 30 line 29 to page 3 lines24 ) for transferring the substrate between said pod and the grounded electromagnetic -shielded chamber .

The limitation , "for transferring the substrate between said pod and the grounded elect has been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 ( 1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279.

The remaining limitations of claim 22 :

wherein said walls comprise an electro magnetic shield member, said electromagnetic shield member including a portion to contact the grounded electromagnetic-shielded chamber during the attachment of said pod to the grounded electromagnetic -shielded chamber.

AAPR describes in specification page 3 lines 17-20 shield metal chambers for EMI protection, it does not specifically mention an electromagnetic shield member provided by said walls.

However Drake in figures 1 , etc. and col. 2 lines 25-31 describes an electromagnetic shield to formed on outer surface that protects the wafer inside from electromagnetic radiation. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Drake's pod including an electro magnetic shield in AAPR'S device for shield metal chamber the to form an outer surface that protects the wafer inside from electromagnetic radiation.

( The limitation including a portion to contact the grounded electromagnetic-shielded chamber during the attachment of said pod to the grounded electromagnetic -shielded chamber is described in Drake figure 1, chamber 10 connected to ground through 26).

With respect to claim 23 , AAPR describes a pod according to claim 22, wherein said lid is arranged in front of said pod . ( AAPR page 2 lines 29 to page 3 line 12).

With respect to claim 24, AAPR describes a pod according to claim 22 , wherein said lid is arranged in a bottom of said pod. ( AAPR page 2 lines 29 to page 3 line 12).

With respect to claim 25, APPR describes a pod according to claim 22, wherein said electromagnetic shield member comprises wire mesh arranged on or within said walls. ( AAPR spec. page 3 lines 21-22).

With respect to claim 26, APPR describes a pod according to claim 22, wherein said electromagnetic shield member comprises metal coatings arranged

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on said walls. ( AAPR spec. page 3 lines 17-18 , inherent instead of the shielded metal covering metal copting can be used).

With respect to claim 28, AAPR describes an apparatus for manufacturing a device using a substrate, said apparatus comprising : an electromagnetic-shielded chamber, ( AAPR specification page 3 ) a transfer unit in said electromagnetic -shielded chamber, ( AAPR specification page 1 lines 14,24-27, etc.) for transferring the substrate between said electromagnetic shielded chamber (The limitation , "for transferring the substrate between said pod and the grounded electromagnetic -shielded chamber" is taken to be a intended use recitation. It is ahs been held that an intended use recitation i.e. manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. See ex parte Masham, 2 USPQ 2d 1647 ( 1987) , see also In re Fuller, 1929 C.D. 172, 388 O.G. 279 ) and a pod attached to an outside surface of said electromagnetic-shielded chamber ( see rejection of claim 22 above ) and a processing unit ( AAPR figure 10, specification page 1 lines 25-27) for pe/orming a process using the substrate transferred into said electromagnetic - shielded chamber from the pod by said transfer unit, (intended use see above) wherein said electromagnetic shielded chamber has a grounded portion to provide a grounded connection to the attached pod. ( Drake figure 1 chamber 10 connected to ground through 26).

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With respect to claim 29, AAPR describes an apparatus according to claim 28, wherein said electromagnetic-shielded chamber comprises a door through which said transfer unit transfers the substrate between said electromagnetic -shielded chamber and the pod, ( AAPR figure 10, specification page 4 lines 17-35) said grounded portion is arranged around said door. ( AAPR figure 10) .

With respect to claim 30, AAPR describes an apparatus according to claim 28, wherein the process performed by said process unit is exposure of the substrate to a pattern. ( AAPR specification page 3 lines 25-35)

With respect to claim 31, AAPR describes an apparatus according to claim 28, wherein a lid of the pod is arranged in front of the pod. ( AAPR specification page 3 lines 4-10)

With respect to claim 32, AAPR describes an apparatus according to claim 28, wherein a lid of the pod is arranged in a bottom of the pod. ( AAPR page 2 line 32-34)

With respect to claim 33, AAPR describes an apparatus according to claim 28, wherein the walls of the pod comprises an electromagnetic shield member. ( Drake figure 1 , col. Lines 25-31 , etc.).

**B.** Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR ( Applicants' Admitted Prior Art ) and Drake et al. ( U.S. Patent No. 5,006,760, herein after Drake) as applied to claims 22-26 etc. above and further in view of Akagawa ( U.S. Patent No. 4,856,904 herein after Akagawa) .

With respect to claims 27 and 35 wherein said electromagnetic shield comprises

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shielding materials provided in walls of said pod.

AAPR and Drake do not specifically mention shielding materials provided in walls of the pod.

However, Akagwa fig.2 # 46, 47 and col.2 line 64 and col. 6 lines 64-68 describes shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter ( less weight) shield.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Akagwa's shielding materials provided in walls of the pod to provide shield materials in intermetant unspecified locations to reduce the electromagnetic leakage and provide a lighter ( less weight) shield.

### ***Response to Arguments***

Applicant's arguments filed on 01/05/2005 have been fully considered but they are not persuasive. for the following reasons :

Applicants' argument is based on improper piece meal analysis of individual references whereas the rejection is based on the combined teachings of AAPR ( primary reference ) and Drake ( Secondary reference). See In re Keller 208 USPQ 871( CCPA 1981).

Applicants' arguments are based on incomplete response for the following reasons.

a) Applicants' argue that Drake in any manner teaches or suggests the feature of Claim 22 that a flange portion of a pod's electromagnetic shield member



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contacts the pounded flange portion of a pounded electromagnetic chamber during attachment of the pod to the chamber outside surface.

b) The Office does not believe the above to be true , however assuming arguendo the above is true then this ( mere statement of alleged difference ) in itself is not sufficient and Applicants' are required to take t least two further steps shown below .

i) Applicants' claim MUST also clearly recite this alleged difference .

It is stated for the record that language for differentiation was suggested in the interview ( see summary ) of May 04, 2005 , namely " without any intervening elements being present " .

Applicants' failure to include the above or similar language and the recitation of open ended language " comprising " does not exclude the presence of other elements ( including dielectric layers ) being present between pod's electromagnetic shield member and the pounded flange portion of a pounded electromagnetic chamber.

Therefore rendering the presently recited claims not commensurate in scope with applicants' arguments.

ii) Applicants' contention that the difference between their invention and the applied references is "a flange portion of a pod's electromagnetic shield member contacts the pounded flange portion of a pounded electromagnetic chamber during attachment of the pod to the chamber outside surface" raises the additional issue that the above recitation (a flange portion of a pod's electromagnetic shield member contacts the pounded flange portion of a pounded electromagnetic chamber during attachment of

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the pod to the chamber outside surface) ( emphasis supplied) is a taken to be functional recitation and cannot be given patentable weight because it is in narrative form . In order to be given patentable weight, a functional recitation must be expressed as a “ means “ for performing the specified function, as set forth in 35 USC Section 112, 6 th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language”. In re Fuller, 1929 C.D. 172, 388 O.G. 279.

Herein Applicants presently have no “ means “ for performing recitation and further for reasons set out under I) above sufficient structure , namely “without any intervening elements being present “ has not be recited in the claims.

Therefore, contrary to Applicants’ contention the presently recited claims are fatally flawed and can only be Finally rejected.

Applicants’ contention with respect to claim 28 that neither the AAPA nor Drake in any manner teaches the feature of the electromagnetic-shielded chamber having a rounded flange portion on its outside surface to provide a grounded connection to an angle portion of the outside surface of electromagnetic shield member of a pod during the attachment of the pod to the chamber outside surface is not persuasive at least for reasons set out above and incorporated here by reference for the sake of brevity .

Therefore claims 22 and 28 are Finally rejected .

Dependent claims 23-27 and 29-33 were alleged to be allowable at least for depending upon allegedly allowable claims 22 and 28, but as shown above claims 22 and 28 are not allowable.

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Therefore dependent claims 23-27 and 29-33 are also not allowable.

Therefore all pending claims are FINALLY rejected.

The above issues were pointed out to the Applicants' several times including several interviews and therefore the Office has no choice but to give a Final rejection

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is ( 571)272-1718. The examiner can normally be reached on 8.00 to 5.00.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven H. Rao

Patent Examiner

August 30, 2005.



LONG PHAM  
PRIMARY EXAMINER